

Application Serial No.: 10/764,978
Amendment Dated: December 23, 2005
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This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method for reproducing conifers by somatic embryogenesis wherein a galactose-containing compound is used as a carbon source for comprising using a sugar with galactose comprising at least one of the sub-units selected from the group consisting of monosaccharides, disaccharides, oligosaccharides, and polysaccharides as a carbon source in an embryogenic culture during at least one of the steps of nutrient medium selected from the group consisting of induction medium, proliferation medium, and prematuration medium and supplementing the nutrient medium with additional sugars.
2. (Cancelled)
3. (Cancelled)
4. (Currently amended) The method of claim [3] 1, wherein the galactose-containing sugar is lactose.
5. (Currently amended) The method of claim 1, wherein the galactose-containing sugar compound is less than about 6% of the nutrient medium.
6. (Currently amended) The method of claim 1, wherein the nutrient medium is gelled or liquid.
7. (Currently amended) The method of claim 1, wherein the conifers are selected from the family *Pinaceae*.

8. (Currently amended) The method of claim 7, wherein the conifers are selected from the genera *Pinus*, *Picea* and *Pseudotsuga*.
9. (Currently amended) The method of claim 8, wherein the conifer is *Pinus taeda* or a hybrid thereof.
10. (Currently amended) The method of claim 8, wherein the conifer is *Pseudotsuga menziesii*.
11. (Currently amended) The method of claim 8, wherein the conifer is *Pinus radiata*.
12. (Currently amended) The method of claim 1 in which the embryogenic culture is cultured in at least one prematuration medium comprising a galactose-containing sugar compound and then transferred to a maturation medium to produce cotyledonary stage embryos suitable for germination.
13. (Currently amended) The method of claim 12, wherein the prematuration medium contains less auxin and less cytokinin than the nutrient medium used during proliferation.
14. (Currently amended) The method of claim 12, wherein the prematuration medium further comprises abscisic acid.
15. (Cancelled).
16. (Currently amended) The method of claim 1, [15] wherein the additional sugars are readily metabolized.
17. (Original) The method of claim 16, wherein the additional sugars are selected from the group consisting of sucrose, glucose, and fructose.

18. (Currently amended) The method of claim 1, wherein the galactose-containing sugar compound is more than about 1% of the nutrient medium.
19. (Currently amended) The method of claim 1, wherein the embryogenic culture contains early stage embryos.
20. (Currently amended) The method of claim 1, wherein the galactose-containing sugar compound is less than about 2% of the nutrient medium.
21. (Currently amended) The method of claim 1, wherein the galactose-containing sugar compound is between about 1% and about 6% of the nutrient medium.
22. (Currently amended) The method of claim 1, wherein the nutrient medium further comprises an auxin and a cytokinin.
23. (Currently amended) A method for reproduction by somatic embryogenesis of conifers selected from the group consisting of *Pinus taeda* and hybrids, *Pinus radiata*, and *Pseudotsuga menziesii* which comprises: using a galactose-containing sugar with galactose comprising at least one of the sub-units selected from the group consisting of monosaccharides, disaccharides, oligosaccharides, and polysaccharides compound in an embryogenic culture nutrient medium selected from the group consisting of [during at least one of the steps of] induction medium, proliferation medium, and prematuration medium and supplementing the nutrient medium with additional sugars.
24. (Cancelled).
25. (Cancelled).

26. (Currently amended) The method of claim [25] 23, wherein the galactose-containing sugar is lactose.
27. (Currently amended) The method of claim 23, wherein the galactose-containing compound is less than about 6% of the nutrient medium.
28. (Currently amended) The method of claim 23, wherein the nutrient medium is gelled or liquid.
29. (Currently amended) The method of claim 23, wherein the conifer is *Pinus taeda* or a hybrid thereof.
30. (Currently amended) The method of claim 23, wherein the conifer is *Pseudotsuga menziesii*.
31. (Currently amended) The method of claim 23, wherein the conifer is *Pinus radiata*.
32. (Currently amended) The method of claim 23 in which the embryogenic culture is cultured in at least one prematuration medium comprising a galactose-containing sugar ~~compound~~ and then transferred to a maturation medium to produce cotyledonary stage embryos suitable for germination.
33. (Currently amended) The method of claim 32, wherein the prematuration medium contains less auxin and less cytokinin than the nutrient medium used during proliferation.
34. (Currently amended) The method of claim 32, wherein the prematuration medium further comprises abscisic acid.
35. (Cancelled).

36. (Currently amended) The method of claim 23 [35], wherein the additional sugars are readily metabolized.
37. (Original) The method of claim 36, wherein the additional sugars are selected from the group consisting of sucrose, glucose, and fructose.
38. (Currently amended) The method of claim 23, wherein the galactose-containing sugar compound is more than about 1% of the nutrient medium.
39. (Currently amended) The method of claim 23 wherein [the embryogenic culture contains] early stage embryos are being cultured in the selected culture medium.
40. (Currently amended) The method of claim 23, wherein the nutrient medium further comprises an auxin and a cytokinin.
41. (Currently amended) The method of claim 23, wherein the galactose-containing sugar compound is less than about 2% of the nutrient medium.
42. (Currently amended) The method of claim 23, wherein the galactose-containing sugar compound is between about 1% and about 6% of the nutrient medium.
43. (Currently amended) A method for reproducing conifers by somatic embryogenesis which comprises: growing conifer cells on a nutrient medium comprising a galactose-containing sugar compound, additional sugars, an auxin, and a cytokinin to produce an embryogenic culture.
44. (New) The method of claim 1, wherein the galactose-containing sugar is galactose.
45. (New) The method of claim 23, wherein the galactose-containing sugar is galactose.